9. Pranav

Program Name: Pranav.java Input File: pranav.dat

Your math professor is not having a good time lately. He has given the class an assignment to determine the best strategy to win the "Pranav" game, a game he made up that is conveniently named after himself. You will be given a line of "pots" of gold, each pot worth a given number of points. Each round of the game, you select the "pot" on either end of the line, take it and add it to your total, and then your opponent does the same. Determine the best possible score you can get, and if that number will win you the game (the goal is to have a larger total than your opponent). You can assume that your opponent will play optimally.

Example: 5, 3, 7, 10 Answer: Winner 15

You choose 10, opponent chooses 7, you choose 5, opponent chooses 3: (10+5) = 15 > (7+3) = 10

Input: The input will begin with an integer, n (0 < n <= 1000), denoting the number of test cases to follow. Each test case will consist of an unknown number of space-separated integers denoting the "pots" of gold the game is to be played with. There will always be an even number of "pots".

Output: For each best possible score, if you are the winner, output the string "Winner", if you are the loser, output the string "Loser", otherwise output "Tie". After that string, output a space, followed by the best possible score you could get.

Sample input:

3 10 7 3 5 10 10 10 10 10 10 8 15 3 7

Sample output:

Winner 15 Tie 30 Winner 22